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(54) ANGULAR VELOCITY SENSOR

(57) Abstract:

PROBLEM TO BE SOLVED: To provide an angular velocity sensor having high sensitivity without increasing a gap between electrodes for inducing torsional vibration.

SOLUTION: This angular velocity sensor adopting an electrostatic driving mode is equipped with a pair of inertial mass bodies, a pair of elastic beams, and a pair of driving plates. The mass bodies are together connected by a link frame of a prescribed length so as to display a point symmetry about the central point of the frame and held in a plane parallel to a substrate. The elastic beams are connected to both sides of the frame so as to longitudinally extend from the central point of the frame in directions opposite to each other leaving a prescribed space between them. The driving plates are connected to the other end sides of the beams, each equipped with an electrode constituting an electrostatic attraction generating structure together with a drive electrode provided on the substrate, and supported so as to be movable at least in one direction in a plane parallel to the substrate so as to allow the mass bodies to torsionally vibrate around the central

point of the frame in concurrence with the generation of electrostatic attraction.

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